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#### UNITED STATES PATENT AND TRADEMARK OFFICE

#### BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RODERICK A. HYDE, MURIEL Y. ISHIKAWA,
JORDIN T. KARE, ERIC C. LEUTHARDT, ELIZABETH A. SWEENEY
and LOWELL L. WOOD JR.

Application 13/728,862 Technology Center 3600

Before ALLEN R. MacDONALD, IRVIN E. BRANCH, and DAVID J. CUTITTA II, *Administrative Patent Judges*.

CUTITTA, Administrative Patent Judge.

# DECISION ON APPEAL STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner's decision to reject claims 1–44, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

<sup>&</sup>lt;sup>1</sup> We use the word Appellant to refer to "applicant" as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Elwha LLC. Appeal Br. 2.

#### CLAIMED SUBJECT MATTER

#### Invention

Appellant's claimed subject matter relates to "electronically estimating probable fees and costs incurred to date in providing . . . healthcare service to the particular patient. The estimating is responsive to . . . received data at least partially indicative of the healthcare service provided to date" such as "a data base of historical fee and cost information for the healthcare service." Spec. ¶46.²

## Exemplary Claim

Claims 1, 38, and 41 are independent. Claim 1, reproduced below with certain limitations at issue italicized, exemplifies the claimed subject matter:

1. computer-implemented method performed by a server system, comprising:

electronically receiving, by a network interface of a server system, data indicative of at least part of a healthcare service, wherein the healthcare service includes at least one of a diagnosis, treatment, or prevention of a particular disease, illness, injury, or other physical or mental impairment provided to a particular patient, the received data including image data indicative of an activity within a proximity of the patient and received from a mobile device of the patient, wherein the activity within the proximity of the patient is related to provision of the healthcare service to the patient, and wherein the activity within the proximity of the patient is indicative of a cost of providing the healthcare service to the patient;

<sup>&</sup>lt;sup>2</sup> We refer to: (1) the originally filed Specification filed December 27, 2012 ("Spec."); (2) the Final Office Action mailed June 3, 2019 ("Final Act."); (3) the Appeal Brief filed November 1, 2019 ("Appeal Br."); (4) the Examiner's Answer mailed November 29, 2019 ("Ans."); and (3) the Reply Brief filed January 27, 2020 ("Reply Br.").

converting, by a processing unit of the server system, the received data into information indicative of one or more units of service provided to the patient;

estimating, by the processing unit of the server system, probable fees and costs incurred to date in providing the healthcare service to the patient, the estimating responsive to the information indicative of units of service provided to the patient, wherein the estimating includes estimating with a prediction interval a range in which the probable fees and costs incurred to date will likely fall based on a probability, and wherein the prediction interval is selected based on the electronically received data;

outputting, by the network interface of the server system, a notification to the mobile device of the patient in response to the probability being below a threshold probability,

wherein the notification includes information indicative of the probable fees and costs incurred to date in providing the healthcare service; and

activating a camera of the mobile device to capture and save an image of the activity occurring within the proximity of the patient.

Appeal Br. 12 (Claims Appendix).

#### REJECTION

The Examiner rejects claims 1–44 under pre-AIA 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Final Act. 2–6.

#### **OPINION**

We review the appealed rejection for error based upon the issues identified by Appellant and in light of Appellant's arguments and evidence. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential).

Arguments not made are waived. See 37 C.F.R. § 41.37(c)(1)(iv) (2019). We disagree with Appellant that the Examiner erred and adopt as our own the findings and reasons set forth by the Examiner to the extent consistent with our analysis herein. We add the following primarily for emphasis.

Appellant argues claims 1–44 as a group. Appeal Br. 7–11. We select claim 1 as representative of the group. *See* 37 C.F.R. §41.37(c)(1)(iv). Claim 1 recites in part:

converting, by a processing unit of the server system, the received data into information indicative of one or more units of service provided to the patient;

estimating, by the processing unit of the server system, probable fees and costs incurred to date in providing the healthcare service to the patient, . . . wherein the estimating includes estimating with a prediction interval a range in which the probable fees and costs incurred to date will likely fall based on a probability.

## Appeal Br. 12.

The Examiner determines that Appellant's Specification does not sufficiently support these limitations "because the Specification does not disclose *how* the received data is actually converted into units of service, *how* probabilities for the fees and costs are determined, and further does not disclose *how* the estimate is obtained *from* the probabilities." Final Act. 3.

Appellant argues that "Appellant's Specification as filed is sufficient to show possession of the elements recited." Appeal Br. 10 (citing Spec.  $\P$  46, 51–54, 94, 98, and 99).

We agree with the Examiner. To satisfy the written description requirement, the Specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. *Vas-Cath, Inc.* v.

Mahurkar, 935 F.2d 1555, 1562–63 (Fed. Cir. 1991). Specifically, to have "possession," the Specification must describe the claimed invention in a manner understandable to a person of ordinary skill in the art and show that the inventor actually invented the claimed invention. *Id.*; *Ariad Pharms.*, *Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). Original claims may fail to satisfy the written description requirement when the invention is claimed and described in functional language but the specification does not sufficiently identify how the invention achieves the claimed function. Id. For software, this can occur when the algorithm or steps for performing the computer function are not explained at all or are not explained in sufficient detail. It is not enough that one skilled in the art could write a program to achieve the claimed function because the specification must explain how the inventor intends to achieve the claimed function to satisfy the written description requirement. Vasudevan Software, Inc. v. MicroStrategy, Inc., 782 F.3d 671, 681–683 (Fed. Cir. 2015); see also Examining Computer-Implemented Functional Claim Limitations for Compliance with 35 U.S.C. § 112, 84 Fed. Reg. 57, 62 (Jan. 7, 2019) (hereinafter "2019 §112 Guidance").

Here, the first limitation argued by Appellant is a computer-implemented functional limitation, reciting "converting, by a processing unit of the server system, the received data into information indicative of one or more units of service provided to the patient." This is a functional limitation because the converting of the received data in the first limitation describes what the claim does; converting data to obtain a desired result, i.e., "information indicative of one or more units of service provided to the patient," rather than any specific structure for performing the converting.

MPEP 2173.05(g) citing *In re Swinehart*, 439 F.2d 210, 212 (CCPA 1971) ("A claim term is functional when it recites a feature 'by what it does rather than by what it is' (e.g., as evidenced by its specific structure or specific ingredients."). The Federal Circuit further informs that "[t]he written description requirement is not met if the specification merely describes a 'desired result." *Vasudevan*, 782 F.3d at 682 (quoting *Ariad*, 598 F.3d at 1349). The "telling question is whether the specification shows possession by the inventor" of how this desired result "is achieved." *Id.* at 683.

We agree with the Examiner's finding that "the Specification does not disclose how the received data is actually converted into units of service" (Final Act. 3) because the "Specification discloses using 'a data mining algorithm' of some kind to perform the conversion of the received data into service units, but does not disclose a particular algorithm and/or set of steps to perform the conversion" (Ans. 4). We further agree that "[m]erely disclosing the inputs (i.e. the received data) and the outputs (i.e. the units of service) is not sufficient to disclose the algorithm/relationship required to obtain the outputs from the inputs." Advisory Act. 2.

The second limitation argued by Appellant, estimating probable fees and costs, is also a functional limitation because it broadly describes the function—estimating—and a desired result (probable fees and costs incurred to date in providing the healthcare service to the patient), rather than any specific structure. *Swinehart*, 439 F.2d at 212. We agree with the Examiner's finding that the Specification "discloses that the probable fees and costs are estimated 'based upon rule sets or algorithms' of some kind. However, the present Specification does not disclose a particular algorithm and/or set of steps to perform the estimation." Ans. 5 (citing Spec. ¶ 51).

Appellant's argument "that it is not necessary to disclose a particular algorithm to perform the claimed steps noted above in order to satisfy the written description requirement" is unpersuasive. Reply Br. 2. The 2019 §112 Guidance requires that:

If the specification does not provide a disclosure of the computer and algorithm(s) in sufficient detail to demonstrate to one of ordinary skill in the art that the inventor possessed the invention that achieves the claimed result, a rejection under 35 U.S.C. 112(a) for lack of written description must be made."

2019 §112 Guidance citing MPEP § 2161.01, subsection I; *Vasudevan*, 782 F.3d at 682–83. Furthermore, Appellant fails to persuasively show that the Specification discloses in sufficient detail any algorithm for performing the computer functions at issue in claim 1.

Accordingly, because Appellant fails to establish that the Specification provides the required algorithms for the limitations at issue we sustain the Examiner's rejection of claim 1 under 35 U.S.C. § 112, first paragraph. We also sustain the Examiner's 35 U.S.C. § 112, first paragraph rejection of independent claims 38, and 41, and of dependent claims 2–37, 39, 40, and 42–44 for similar reasons.

#### **CONCLUSION**

We affirm the Examiner's decision to reject claims 1–44 under 35 U.S.C. § 112, first paragraph.

## **DECISION SUMMARY**

# In summary:

Claims	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
Rejected				
1–44	112, first paragraph	Written Description	1–44	
Overall			1–44	
Outcome				

## TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

# **AFFIRMED**